This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (currently amended) A method for starting an internal combustion engine with at least a valve that may be held in a position~~deactivated~~, the method comprising:

~~processing a signal indicative of a request to start said engine;~~

closing at least an exhaust valve of at least a cylinder in said engine in response to ~~said~~ a request to start said engine~~signal~~; ~~and~~

opening~~maintaining~~ said exhaust valve ~~in said closed position until~~ after a combustion event in said at least a cylinder; and.

varying the number or pattern of operating valves in at least a cylinder of said engine after said combustion event.

2. (currently amended) The method of Claim 1 wherein said exhaust valve is a valve that may be mechanically ~~deactivated~~ held in position.

3. (currently amended) The method of Claim 1 wherein said exhaust valve is an electrically~~mechanically~~ actuated valve.

4. (original) The method of Claim 1 wherein said exhaust valve is closed before said engine begins to rotate and maintained closed until after a combustion event in said cylinder occurs, and then the valve is opened.

5. (currently amended) The method of Claim 1 wherein an operator activating a switch generates said requestsignal.

6. (currently amended) The method of Claim 1 wherein said requestsignal is made by a signal generated remotely from a vehicle.

7. (currently amended) The method of Claim 1 wherein all exhaust valves are maintained closed until after a respective combustion event for said respective exhaust valve.

8. (currently amended) A method for starting an internal combustion engine at least a valve that may be deactivatedheld in a position, the method comprising:

processing a signal indicative of a request to start said engine;

closing at least an exhaust valve in at least a cylinder of said engine in response to asaid signalrequest to start said engine;

determining engine position in response to said signalrequest;

injecting fuel into said cylinder based on said determined engine position;

combusting said injected fuel in said cylinder;

and

maintaining said exhaust valve closed until after combustion of said injected fuel in said cylinder.; and

varying the number or pattern of operating valves in at least a cylinder of said engine, during a cycle of said cylinder, after said combustion event.

9. (currently amended) The method of Claim 8 wherein said exhaust valve is a valve that may be mechanically ~~deactivated~~ held in position.

10. (currently amended) The method of Claim 8 wherein said exhaust valve is an electrically~~mechanically~~ actuated valve.

11. (currently amended) The method of Claim 8 wherein an operator activating a switch generates said ~~signal~~request.

12. (currently amended) The method of Claim 8 wherein said ~~signal~~ request is signal generated remotely from a vehicle.

13. (original) The method of Claim 8 wherein said injected fuel produces a lean air-fuel mixture in said cylinder.

14. (original) The method of Claim 8 wherein said injected fuel produces a rich air-fuel mixture in said cylinder.

15. (original) The method of Claim 8 wherein said injected fuel produces a stoichiometric air-fuel mixture in said cylinder.

16. (currently amended) A method for starting an internal combustion engine with electromechanically actuated valves, the method comprising:

~~processing a signal indicative of a request to start said engine;~~

closing at least an exhaust valve of said engine in response to a~~said~~ ~~signal~~request to start said engine;

opening at least an intake valve of said engine in response to said request;

rotating engine in response to said request;
closing said at least one intake valve;
~~determining engine position in response to said signal;~~
~~adjusting at least an intake valve timing for at least a cylinder of said engine based on said determined engine position;~~
injecting fuel ~~into~~ said at least a cylinder of said engine;
combusting said fuel in said at least a cylinder of said engine; and
operating said at least an exhaust valve in said at least a cylinder after said combustion in said at least a cylinder.

17. (cancelled) The method of Claim 16 wherein said adjusting at least an intake adjustment for at least a cylinder of said engine opens said at least an intake valve until an intake stroke in said at least a cylinder.

18. (original) The method of Claim 16 wherein said injected fuel produces a lean air-fuel mixture in said at least a cylinder.

19. (original) The method of Claim 16 wherein said injected fuel produces a rich air-fuel mixture in said at least a cylinder.

20. (original) The method of Claim 16 wherein said injected fuel produces a stoichiometric air-fuel mixture in said at least a cylinder.

21. (currently amended) A method for starting an internal combustion engine with electromechanically actuated valves, the method comprising:

~~processing a signal indicative of a request to start said engine;~~

closing at least an intake valve of at least a cylinder in said engine in response to a request to start said engine~~signal~~;

opening at least an exhaust valve of said at least a cylinder in said engine in response to said ~~signal~~request;

~~determining engine position in response to said signal~~;

closing said at least an exhaust valve in said at least a cylinder before a first air induction event in said at least a cylinder;

injecting fuel ~~in~~to said at least a cylinder;

opening said at least an intake valve in said at least a cylinder, inducting an ~~desired~~ air amount ~~based on said injected fuel~~;

combusting said injected fuel in said at least a cylinder; and

opening said at least an exhaust valve in said at least a cylinder after said combustion in said at least a cylinder.

22. (original) The method of Claim 21 wherein said injected fuel produces a lean air-fuel mixture in said at least a cylinder.

23. (original) The method of Claim 21 wherein said injected fuel produces a rich air-fuel mixture in said at least a cylinder.

24. (original) The method of Claim 21 wherein said injected fuel produces a stoichiometric air-fuel mixture in said at least a cylinder.

25. (currently amended) A computer readable storage medium having stored data representing instructions executable by a computer to control an internal combustion engine of a vehicle, said storage medium comprising:

~~instructions for processing a signal indicative of a request to start said engine;~~

instructions for closing at least an exhaust valve of at least a cylinder in said engine in response to a request to start said engine, and maintaining said exhaust valve closed during rotation of said engine until after a combustion event in said cylinder~~, in response to said signal~~; and

instructions for varying the number or pattern of operating valves in at least a cylinder of said engine after said combustion evemt.~~and~~

~~instructions for opening said at least an exhaust valve from said closed position after a combustion event in said cylinder.~~

26. (new) The method of Claim 2 wherein said electrically actuated valve is an electromechanical valve.

27. (new) The method of Claim 10 wherein said electrically actuated valve is an electromechanical valve.

28. (new) A method for starting an internal combustion engine with at least a valve that may be held in a position, the method comprising:

maintaining a mechanically actuated exhaust valve in a closed position in at least a cylinder of said

engine, during at least a portion of an exhaust stroke of said at least a cylinder, prior to a first combustion event; and

opening said mechanically actuated exhaust valve after a first combustion event in said at least a cylinder.

29. (new) The method of Claim 1 wherein said varying the number or pattern of operating valves, operates said engine in a multi-stroke cylinder mode.

30. (new) The method of Claim 1 wherein said varying the number or pattern of operating valves, operates said engine in a cylinder deactivation mode.

31. (new) The method of Claim 1 wherein said varying the number or pattern of operating valves, changes cylinder charge motion.